



Crystals dance during a reaction! Of course they are excited under UV light! The self-propulsion of single crystals of three Zn(II) complexes under UV light has been discovered. The extremely rare examples of dynamic single crystals where excitation by light or heat induces macroscopic motility present not only a visually appealing demonstration of the utility of molecular materials for conversion of energy to work, but they also provide a unique opportunity to explore the mechanistic link between collective molecular processes and their consequences at a macroscopic level. The photosalient effect (photoinduced leaping) observed with crystals of three coordination complexes which is fuelled by a [2 + 2] photocycloaddition reaction is unprecedented in the solid-state [2+2] photochemical reaction. Unlike a plethora of other dimerization reactions, when exposed to even weak UV light, single crystals of these materials burst violently, whereby they are propelled to travel several millimetres. The results point to a multistep mechanism where the strain energy that has been accumulated during the dimerization triggers a rapid structure transformation which ultimately results in crystal disintegration. This has been considered as a hot paper by the journal and highlighted as their cover story of the issue.

Single Crystals Popping Under UV Light: A Photosalient Effect Triggered by a [2+2] Cycloaddition Reaction by Raghavender Medishetty, Ahmad Husain, Zhaozhi Bai, Tomče Runčevski, Robert E. Dinnebier, Panče Naumov, and Jagadese J. Vittal, *Angewandte Chemie*, 2014, 53, xxx. (DOI: 10.1002/anie.20402040).

<http://onlinelibrary.wiley.com/doi/10.1002/anie.201403852/abstract>